

# DANESHVARFARD Farveh

C.U.R.S. (Centre Universitaire de Recherche en Santé)  
Université de Picardie Jules Verne  
(INSERM U1105-GRAMFC)  
CHU Sud (Centre Hospitalo-Universitaire)  
Avenue Laënnec  
80054 Amiens, France

Tel: (+33) 753101410, (+98) 9153042476

Email: [farveh.daneshvarfard@etud.u-picardie.fr](mailto:farveh.daneshvarfard@etud.u-picardie.fr)  
[f.daneshvarfard@yahoo.com](mailto:f.daneshvarfard@yahoo.com)

## Educational background

---

**Ph.D.:** Biomedical engineering - Neuroscience (2020)

Cotutelle Phd student between K. N. Toosi University of Technology and Picardie Jules Verne University.

**K. N. TOOSI University of Technology** - Seyed Khandan, Shariati Ave., Tehran, Iran.

**Picardie Jules Verne University (UPJV)** - Avenue Laënnec, Amiens, France.

**Thesis title:** Functional and structural joint modeling of age-related changes in the human brain using EEG data and MR images

**M.Sc.:** Electrical engineering - Electronics (2013)

**Ferdowsi University of Mashhad** - Ferdowsi University of Mashhad (FUM) campus, Azadi Sq., Mashhad, Khorasan Razavi, Iran.

**Thesis title:** Design and evaluation of a pressure and temperature monitoring system for pressure ulcer prevention

**B.Sc.:** Electrical engineering - Electronics (2010)

**Ferdowsi University of Mashhad** - Ferdowsi University of Mashhad (FUM) campus, Azadi Sq., Mashhad, Khorasan Razavi, Iran.

**Thesis title:** Improving function of Geoelectric device for detecting ground water resources

## Publications and patent

---

### Journal Papers:

- F. Daneshvarfard, H. Abrishami Moghaddam, G. Kongolo, F. Wallois, M. Mahmoudzadeh, "Functional and structural correlates of the preterm infant's brain: relating developmental changes of auditory evoked responses to structural maturation", *Brain Structure and Function*, DOI: 10.1007/s00429-020-02117-3, 2020.
- F. Daneshvarfard, H. Abrishami Moghaddam, Gh. Dehaene-Lambertz, G. Kongolo, F. Wallois, M. Mahmoudzadeh, "Neurodevelopment and asymmetry of auditory-related-responses to repetitive syllabic stimuli in preterm neonates based on frequency-domain analysis", *Scientific Reports*, 9:10654, 2019.
- F. Daneshvarfard, N. Maarefi, H. Abrishami Moghaddam, F. Wallois, "A survey on stimuli for visual cortical function assessment in infants", *Brain & Development*, 40, 2-15, 2018.
- F. Daneshvar Fard, S. Moghimi, R. Lotfi, "Design and evaluation of a pressure and temperature monitoring system for pressure ulcer prevention", *Iranian Journal of Medical Physics*, 11(2), 242-252, 2014.
- S. Rahimi Malakshan, H. Abrishami Moghaddam, F. Daneshvarfard, A. Khadem, "A survey on functional and structural analysis of age-related changes in normal brain cortex", submitted to *Cortex*.
- S. Rahimi Malakshan, F. Daneshvarfard, H. Abrishami Moghaddam, "A correlational study between microstructural, macrostructural and functional age-related changes in the human visual cortex", to be submitted.

### Conference Papers:

- F. Daneshvar Fard, S. Moghimi, R. Lotfi, "Evaluating pressure ulcer development in wheelchair-bound population using sitting posture identification", The 7th International conference on Bioinformatics and Biomedical engineering (iCBBE2013), Beijing, China, 2013.
- F. Daneshvar Fard, S. Moghimi, R. Lotfi, "Pressure ulcer risk assessment by monitoring interface pressure and temperature", 21st Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, 2013.

## Patent:

- F. Daneshvar Fard, S. Moghimi, R. Lotfi, "Design and evaluation of a pressure and temperature monitoring system for pressure ulcer prevention", (2015). *Patent No. 84238*. Tehran, Iran: *State Organization for Registration of Deeds and Properties, Intellectual Property Center*.

## Book: (Co-operation)

- M. Kantardzic, A. Torkian, "Data mining: Concepts, models, methods and algorithms", Third edition, *Niaze danesh*, Tehran, Iran, 1399.

## Skills

---

**Software skills:** MATLAB, EEGLab, Freesurfer, FSL, SPM, MRICro, MRICron, 3Dslicer, Brain voyager, Proteus, Cadence, Pspice, Codevision AVR.

### Professional skills:

- Biological signal processing (EEG/ERP), Medical image processing (MRI), Data mining, Pattern recognition, Digital signal processing, Functional and structural analysis of the human brain (cognitive neuroscience), Statistical analysis.
- Design, layout, simulation and implementation of electronic circuits.

**Other skills:** Teamwork, Public speaking, Research, Teaching, Project development and management.

**Language skill:** PERSIAN (Native), ENGLISH.

## Teaching experiences

---

**Lecturer at SADJAD university of Technology**, Teaching "Electronic Circuits" and "Pulse Circuits" courses (2013-2014).

**Lecturer at Islamic Azad University, Mashhad Branch**, Teaching "Electronic Circuits" and "Electrical Circuits" courses (2013-2014).

**Teacher assistant at K. N. Toosi University of technology**, Teaching "Statistical Pattern Recognition" and "Digital Image Processing" courses (2015-2016).

## Professional experiences

---

- **Research assistant (Post Doc) at Cognition and Sensory Emotion Lab, Ferdowsi University of Mashhad**, EEG/ERP signal processing (2020).
- **Research assistant at Sharif University Advanced Technologies Incubator**, Software tasks, programming (MATLAB), data mining, signal and image processing (2014).

## References

---

- **Pr. Fabrice. Wallois** (PHD supervisor)

*INSERM U1105, Université de Picardie, CURS, Amiens, France*

*INSERM U1105, Unit Exploration Fonctionnelles du Système Nerveux Pédiatrique, South University Hospital, Amiens, France*

Email: [fabrice.wallois@u-picardie.fr](mailto:fabrice.wallois@u-picardie.fr)

- **Pr. Hamid Abrishami Moghaddam** (PHD supervisor)

*INSERM U1105, Université de Picardie, CURS, Amiens, France*

*Faculty of Electrical and Computer Engineering, K.N. Toosi University of Technology, Tehran, Iran*

Email: [moghadam@eetd.kntu.ac.ir](mailto:moghadam@eetd.kntu.ac.ir)

- **Dr. Mahdi Mahmoudzadeh** (non-official supervising of PHD thesis)

*INSERM U1105, Université de Picardie, CURS, Amiens, France*

*INSERM U1105, Unit Exploration Fonctionnelles du Système Nerveux Pédiatrique, South University Hospital, Amiens, France*

Email: [mahdical@yahoo.com](mailto:mahdical@yahoo.com)

- **Dr. Sahar Moghimi** (M.sc Supervisor)

Associate professor of Electrical Engineering Department, Ferdowsi University of Mashhad

Email: [s.moghimi@um.ac.ir](mailto:s.moghimi@um.ac.ir)

- **Pr. Reza Lotfi** (M.sc Supervisor)

Professor of Electrical Engineering Department, Ferdowsi University of Mashhad

Email: [rlotfi@ieee.org](mailto:rlotfi@ieee.org)